RFI

Your Critical Link

Cellular Antennas

Cellular Antennas

Collinear Antennas
CDQ2100 Q-Fit™ Series

- Based on our already successful CD2100 series; offering the same revolutionary multiband performance
- Ideal for fringe areas and rural applications
- Employs the new Q-Fit™ removable whip system for fast and simple removal
- Supplied with stainless steel spring with 13mm mounting stud, 5m of Cellfoil™ 9006 low loss cable and terminated with a FME female connector
- As used by emergency services

Model	Gain
CDQ2195	6.5 dBi
CDQ2197*	7.5 dBi
CDQ2199*	9.0 dBi

*Available in late 2010

CD2100 Series

- Multiband antenna for voice and data
- Provides high gain performance across 3G850, GSM900/1800, 3G900 & 3G2100
- Ideal for fringe areas and rural applications
- Supplied with stainless steel spring with 13mm mounting stud, 5m of Cellfoil™ 9006 low loss cable and terminated with a FME female connector
- As used by emergency services

Model	Gain
CD2194	5.5 dBi
CD2195	6.5 dBi
CD2197	7.5 dBi
CD2199	9.0 dBi

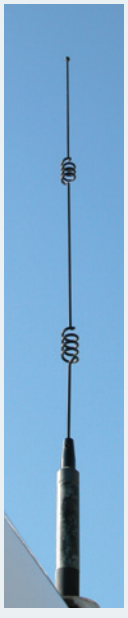
COL2100 Series

- Based on the same design and performance as the CD2100 series
- Supplied with stainless steel mounting tube, 10m of Cellfoil™ 9006 low loss cable and terminated with a FME female connector

Model	Gain
COL2194	5.5 dBi
COL2195	6.5 dBi
COL2197	7.5 dBi
COL2199	9.0 dBI

Elevated Feed Antennas
Elevated Feed Series

- High performance on virtually any mounting position due to elevated feed design
- Black finish won't scratch or peel
- Range of fitting available for fender, gutter and magnetic mount
- Supplied with 5m of Cellfoam™ 9001 cable and various connectors (mini UHF, FME or N-male)



Model	Gain
CD1150	1.5 dBi
CD1160	1.5 dBi
CD1210	1.5 dBi
CD1250	5.0 dBi
CD1610	1.5 dBi
CD1625	3.0 dBi

		Collinear Antennas			Elevated Feed Series				
	MHz	CDQ2100 Series	CD2100 Series	COL2100 Series	CD1210 CD1225 CD1250	CD1610	CD1625	CD1160	T5/T7
Next G	824-896	√	√	√	√				√
GSM900	890-960	√	√	√		√	√	√	√
GSM1800 & PCS1800	1710-1880	√	√	√			√		√
3G2100	1910-2170	√	√	√					√

On-Glass Antennas
Internal On-Glass Series

- Can be installed virtually without being seen on a vehicle windscreen
- Quick and easy to install
- Multiband to suit all cellular networks
- Completely internal; no threat of vandalism, no concerns with external wind noise and no car wash damage
- T5/T7-F is supplied with 3m RG174 cable and either SMA male of FME female connector
- ITG4000 supplied with 5m of 9014 cable and SMA male

Model	Gain
T5/T7-F	2.2 dBi
ITG4000 Quadrant™	4.0 dBi
ITG5000* Quintet™	4.5 dBi

*Integrated GPS antenna

Roof Mount Antennas
SW Series

- Roof mount antennas provide the strongest reception and mount reliable performance
- Black finish won't scratch or peel
- Also available in heavy duty magnetic mount versions

Model	Gain
SW1405	0.0 dBi
SW1485/1486*	3.0 dBi
SW1495	5.0 dBi
SW1605	0.0 dBi
SW1685/1686*	3.0 dBi

*Heavy duty magnetic mount version

On-Glass Antennas
X-Glass™ Series

- Industry leading multiband external on-glass antennas
- European-style whip
- XG887 supplied with 3 dBi and utility gain whips

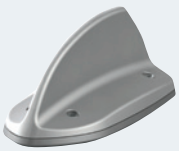
Model	Gain
XG884	0 dBi & 3 dBi
XG887	3 dBi

Specialised Antennas
Low Profile Antenna (CSM900)

- Low profile ground independant antenna
- Ideal for fixed and mobile data applications
- Stud mounting offers ease of installation
- Supplied with 1.25M low loss RG58 cable and SMA male connector
- Other cable/connector configurations available upon request

Transit Antenna (TLA4100/TLA4200)

- Designed specifically for rail, light rail and bus applications
- Utilises a high impact, UV stable radome which is IP68 rated to fully protect against ingress of dust and water
- Meets European Traction Industry Standards
- TLA4200 includes GPS functionality



Model	Gain
CSM900	2 dBi
TLA4100/TLA4200	6 dBi

On-Glass Antennas				Roof Mount Antennas					Specialised Antennas	
XG884	XG887	ITG4000	ITG5000 ITG5001	SW1405	SW1605	SW1485 SW1486	SW1495	SW1685 SW1686	CSM900*	TLA4100* TLA4200*
√	√	√	√	√		√	√		√	√
√	√	√	√		√			√	√	√
√		√	√						√	√
			√						√	√

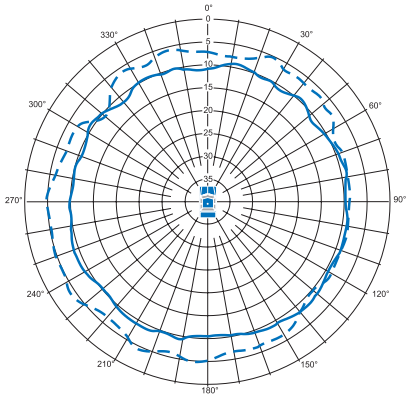
* Plus 2.4-2.5 GHz

Antenna Selection: The Facts

Why is the antenna important?

The antenna is a device for transmitting and/or receiving signals - the eyes and ears of your communication system. A good antenna is designed to be “in-tune” to the signal you are seeking - your phone or radio “sees” the signal and you hear a clear conversation. Use a poor antenna and you simply cannot communicate effectively.

What is antenna gain?



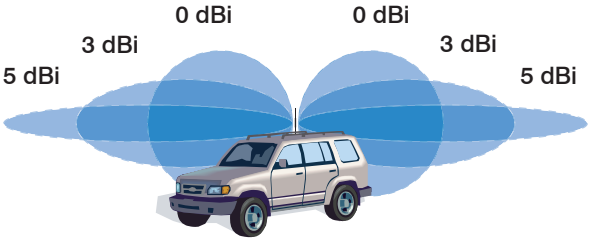
An antenna must physically meet certain requirements to deliver its claimed gain. The laws of physics cannot be defeated and without these characteristics there is simply no way to increase antenna gain.

Various antenna manufacturers use different references when declaring their gain figures. In the absence of a defined reference, come claims made in catalogues and on retail packaging by some manufacturers are just plain wrong.

When selecting an antenna be sure to make a couple of basic checks:

1. Look for the stated gain reference, we’d suggest either dBi, dBd or dB over 1/4 wave. We can’t promise that this means the manufacturer has actually tested the gain (like RFI do) but it certainly indicates that they know they need a reference.

2. Compare a couple of antennas that are hanging next to each other in a store, or check the physical length of the antenna in a catalogue. If one is claiming 6.5dBi and is 900mm long and another is claiming 9dBi at a similar length then consider how can this be true.



Antenna gain and radiation patterns

Mobile antennas should radiate in a symmetrical pattern 360° around the antenna.

As gain is increased, the radiation gets compressed into a thinner pattern and reaches out further to the sides. The more gain an antenna has the thinner the pattern becomes and the further the signal can travel or reach.

However a thinner radiation pattern may prevent strong signal reception when driving through hills and valleys or amongst built up areas such as city centres where base stations tend to be located on buildings.

Another thing to consider is whether the antenna is ground plane independent or not. Mounting an antenna that isn’t designed to work without a ground plane anywhere but in the middle of your cars roof will distort the radiation pattern so you no longer get nice 360° radiation resulting in dropped calls. So check the following with your dealer:

1. Will most of my use be in city or travelling through hills and valleys? If so choose a lower gain antenna. If most of your use will be relatively flat terrain then a higher gain option may suit your needs.

2. Is the antenna ground independent? If not, are you willing to mount it in the middle of the roof of your vehicle?

For more information contact **1300 000 RFI** or **rfi.com.au**

Your Nearest Dealer is:

NSW
3 Lenton Place
PO Box 4762
North Rocks NSW 2151

VIC
Bayswater Business Park
46 Coporate Boulevard
PO Box 265
Bayswater VIC 3153

WA
45 Tomlinson Street
Welshpool WA 6106

QLD
Northlands Business Centre
30 Raubers Road
PO Box 340
Banyo QLD 4014

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89 Grange Road
Allenby Gardens SA 5009
PO Box 5
Wellend SA 5007